## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1.    (Currently Amended) A method comprising:

receiving a network communication including an asset having image data and patient data;

storing the asset and validating the patient data in parallel, wherein validating the patient data includes issuing a reconciliation event when the patient data is invalid or incomplete;

requesting the invalid or incomplete patient data to reconcile the patient data during the reconciliation event and to add reconciled patient data and a revision history associated with the reconciled invalid data to the asset; and

forwarding the asset with the added reconciled patient data and the revision history upon reconciling the patient data.


2.    (Original) The method of claim 1, wherein receiving a network communication comprises:

storing the asset in a ringtail buffer while receiving the network communication; and

instantiating a validation software module and a storage manager software module, wherein the validation software module and the storage manager receive the asset from the ringtail buffer in parallel.


3.    (Previously Presented) The method of claim 1 further comprising:

receiving the network communication with multiple software modules; and

storing the asset and validating the patient data with different software modules.

4.      (Previously Presented) The method of claim 1, wherein the patient data comprises medical data and the image data comprises medical images.

5.      (Currently Amended) The method of claim 4, wherein the medical data comprises patient information, session information and study information.

6.      (Previously Presented) The method of claim 4, wherein validating the patient data comprises syntactically and semantically validating a number of DICOM tags within the patient data.

7.      (Canceled)

8.      (Previously Presented) The method of claim 1, wherein storing the image data comprises buffering the asset to a local storage medium.

9.      (Previously Presented) The method of claim 1, wherein forwarding the network communication upon validating the asset comprises initiating and outbound network communication prior to receiving all of the image data.

10.     (Previously Presented) The method of claim 1, wherein receiving the network communication comprises receiving a number of packets from a network, and where storing the image data and validating the patient data commences after receiving a first portion of the packets.

11.     (Original) The method of claim 1, wherein forwarding the network communication comprises forwarding the network communication to a plurality of storage systems in parallel.

12.     (Currently Amended) A method comprising:

receiving a number of packets with multiple software modules listening to a
single communication socket of a TCP/IP-based network, wherein the packets
contain a storage asset having image data and patient data;

selectively process the patient data and the image data with separate software
modules to store the storage asset and validate the patient data in parallel as the
packets are received;

issuing a reconciliation event when patient data is invalid or incomplete;

requesting the invalid or incomplete patient data to reconcile the patient data
and to add reconciled patient data and a revision history associated with the
reconciled patient data to the storage asset; and

forwarding the storage asset including the reconciled patient data and the
revision history associated with the reconciled patient data to a network destination
upon validating the patient data and prior to receiving all of the image data.

13.     (Currently Amended) The method of claim 12, wherein the patient data
comprises medical data and the image data comprises medical images.

14.     (Currently Amended) The method of claim 13, wherein the medical data
comprises patient information, session information and study information.

15.     (Previously Presented) The method of claim 14, wherein validating the
patient data comprises semantically and syntactically validating a number of
DICOM tags within the patient data.

16.     (Currently Amended) A router comprising:

a computer-readable medium storing routing information mapping
destinations to routes within a network;

a storage manager software module that receives a network communication including an asset having image data and patient data, and stores the asset to a storage device;

a validation software module that validates the patient data in parallel with the storage of the asset, wherein the validation software module issues a reconciliation event when the patient data is invalid or incomplete to reconcile the invalid or incomplete data;

a patient manager that reconciles invalid data in the patient data during the reconciliation event to form reconciled patient data and a revision history associated with the reconciled invalid data; and

a routing module that forwards the storage asset with the reconciled patient data and the revision history associated with the reconciled invalid data added to a network destination in accordance with the routing information upon the validation of the patient data.

17.    (Original) The router of claim 16 further including a computer-readable medium buffering the network communication in a ringtail buffer, wherein the storage manager software module and the validation software module read the network communication from the ringtail buffer.

18.    (Previously Presented) The router of claim 16, wherein the patient data comprises medical data and the image data comprises medical images.

19.    (Previously Presented) The router of claim 18, wherein the medical data comprises patient information, session information and study information.

20    (Previously Presented) The router of claim 18, wherein the validation software module syntactically and semantically validates a number of DICOM tags within the patient data.

21.     (Canceled)

22.     (Original) The router of claim 16, wherein the routing module forwards the network communication to a plurality of storage systems in parallel.

23.     (Currently Amended) A method comprising:

  storing routing information mapping destinations to routes within a network;

  receiving a network communication comprising destination information and a storage asset having image data and patient data;

  validating the image data and patient data of the storage asset, wherein validating includes issuing a reconciliation event when one of the image data and the patient data is invalid or incomplete;

  requesting the invalid or incomplete image data and patient data to reconcile the invalid or incomplete image data and patient data during the reconciliation event and to add reconciled image data, a revision history associated with the reconciliation event and patient data to the storage asset;

  storing a plurality of outbound network communications in a plurality of queues, wherein the outbound network communications include references to the storage asset;

  selecting a plurality of routes from the routing information; and

  forwarding the network communications with the added reconciled image data, the revision history associated with the reconciliation event and patient data according to the selected routes in parallel.

24.     (Original) The method of claim 23, wherein selecting a plurality of routes comprises selecting routes to a plurality of archive systems.

25.     (Original) The method of claim 23, further comprising:

  storing a set of routing rules;

  comparing at least a portion of the data to the set of routing rules; and

selecting a plurality of routes from the routing information based on the destination information and a result of the comparison.

26. (Original) The method of claim 23, wherein the network comprises a medical imaging network and the network communication complies with the DICOM protocol, and further wherein storing routing information comprises storing routing information mapping Application Entity Names (AENames) to routes within the medical imaging network.

27. (Original) The method of claim 26, wherein selecting a plurality of routes from the routing information comprises comparing an AEName defined within the network communication to the AEName defined within the routing information.

28. (Original) The method of claim 23, wherein the network communication complies with the DICOM protocol, and further wherein comparing at least a portion of the medical asset data comprises:

parsing the medical asset data to identify a set of DICOM tags and corresponding data; and

assessing a routing rule from the set of routing rules based on the DICOM tags and corresponding data.

29. (Original) The method of claim 23, wherein storing a set of routing rules comprises storing an XML-based set of rules, wherein the rules conform to a user-defined grammar for routing the medical asset data.

30. (Original) The method of claim 29, further comprising presenting an interface for receiving user input that defines the user-defined grammar.

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